

Remarks:

Claims 1-15 are in this case. All claims have been rejected.

Claim Rejections - Nonstatutory Double Patenting:

All claims have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,289,151 to Kazarinov, et al. (hereinafter "Kazarinov").

The judicially created doctrine of obviousness type double patenting prohibits persons from obtaining an extension of the right to exclude through claims that are not patentably distinct from claims in a commonly owned earlier patent. (*Eli Lilly and Co. v. Barr Laboratories, Inc.*, 251 F.3d 955 (Fed.Cir.2001)). Under the "one way" obviousness test, the examiner asks *whether the application claims are obvious over the patent claims*. (*In re Todd A. Berg, Donley D. Rowenhorst, James G. Berg and William K. Leonard*, 140 F.3d 1428, 1432 (Fed.Cir. 1998)).

The applicants of the instant invention discovered that when the pulse train for a signal has a regular repetition rate (i.e., each of the frequencies of the pulse train differs from another frequency of the pulse train by an equal amount), a single-stage all-pass optical filter can be used to generate a large tunable delay for the signal. (Specification, page 6, lines 9-13). Additionally, applicants have discovered that when the repetition rate is regular, as defined above, a single-stage all-pass optical filter can be effective in correcting certain dispersion such as the linear chirp of a pulsed laser. (Specification, page 6, lines 13-15).

These functions are accomplished by configuring the all-pass optical filter in a new way. (Specification, page 6, lines 15 - 21). That configuration is claimed in the instant claims. For example, claim 1 includes the limitation,

"wherein the all-pass optical filter is configured to apply a plurality of frequency-dependent time delay periods to the input optical pulse to define a time delay spectrum having a plurality of delay peaks, and the free spectral range of the filter as defined by the spacing between the delay peaks is matched to the regular repetition rate of the input optical pulse". (Application, Claim 1). This limitation does not appear in any of the Kazarinov claims.

Kazarinov's claims are silent as to the free spectral range of the filter and matching of the delay peaks to the repetition rate of the input optical pulses. This is because the discovery of this configuration of all-pass optical filters occurred after Kazarinov was filed. In fact, the instant application reflects the realization that a single all-pass filter configured according to the different and inventive configuration can be used where Kazarinov teaches the need for multiple all-pass filters.

The instant claims are patentably distinct from Kazarinov in the inventive configuration. It is respectfully requested that the nonstatutory double patenting rejection be withdrawn and the application should be allowed.

Respectfully submitted,



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